Washington Master Address Services (WAMAS)
Geocoder Web Service

Version 4.00   7/22/2015

Introduction

The geocoding service accepts a street address and returns location information. Addresses are matched against various sources including the Master Address File (MAF), County parcels and street centerlines. This service geocodes to zip code, post office, city and zip+4 if a street level match isn't possible. The latitude, longitude, accuracy and source values are also returned. This service uses the ArcGIS Server software from Environmental Systems Research Institute to perform the geocoding.

Test URL

https://test-wamas.des.wa.gov/geocoder/service.asmx

Production URL

https://state-wamas.wa.gov/geocoder/service.asmx

Inputs	Example	Description	
Address	101 Israel Rd SE	Address to geocode with house number and all components.	(optional)
Zip	98501	5 Digit Zip Code	(optional)
City	Tumwater	City Name	(optional)
Zip4	5570	Zip Plus 4	(optional)
Consumer	DOH	Used to track usage	(required)
Outputs			
Status	M	Matched (M) or Unmatched (U)	
Score	100	Numeric score returned from ESRI's address locators	
Source	MAF	Source data used for geocoding	
Locator		URL for the REST endpoint of the address locator	
Accuracy	Close	Close, Approximate or Very Approximate	
Longitude	-122.96426	WGS84 in decimal degrees	
Latitude	47.14131	WGS84 in decimal degrees	
Av_date	N	Date and time geocoding was attempted	
Error_status	Invalid Input	Any application messages	

Consumption Example

This assumes your Visual Studio 2010 web reference is named "Geocoder" and VB.NET is the language.

Dim geo_obj As New Geocoder.Geocoder
Dim geo As New Geocoder.Geocode
geo_obj.Url = "https://test-wamas.des.wa.gov/geocoder/service.asmx"
geo = geo_obj.FindAddress("101 Israel Rd SE", "98501", "Tumwater","","DOE")
The geo object will have the input and output values as properties.

Locators Used

| Reference Data	Status	Score	Accuracy	~Horizontal Accuracy
MAF Address Points	M	100 - 80	High	+- 100 ft.
NavTeq Points	M	100 - 80	High	+- 100 ft.
County Parcel Points	M	100 - 80	Medium	+- 300 ft.
NavTeq Streets	M	100 - 80	Medium	+- 300 ft.
TIGER 2010 Streets	M	100 - 80	Medium	+- 300 ft.
TIGER 2006 Streets	M	100 - 80	Medium	+- 300 ft.
Zip4 Points	M	60	Low	+- 1000 ft.
NavTeq Street Points	M	50	Low	+- 1000 ft.
GNIS Points	U	40	Low	+- 5 Miles
Zip 5 Points	U	30	Low	+- 5 miles
Post Office Points	U	30	Low	+- 10 Miles

Horizontal Accuracy

The horizontal accuracy values in the table above represent a general guideline. Horizontal accuracy is generally higher in urban areas and less accurate in rural areas. Based on the reference data used, the position of a geocode can range from exact to miles from the correct position. The accuracy is also relative to the target location of an address (e.g. mailbox, condo, driveway, rooftop of structure). For geocodes using parcel points (centroids) the size and shape of the parcel has a direct impact on the accuracy.

Search Order

Matching continues until a suitable match is found (score above 80 for point or street matches).

  (1) Post Offices
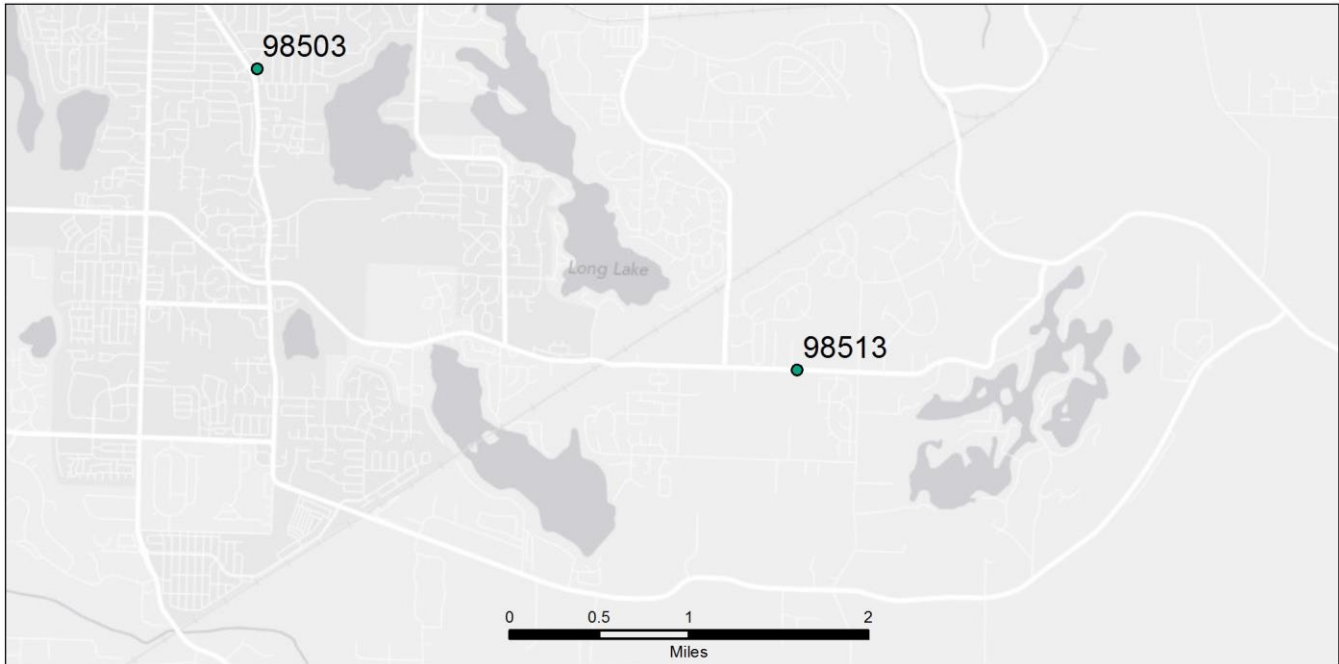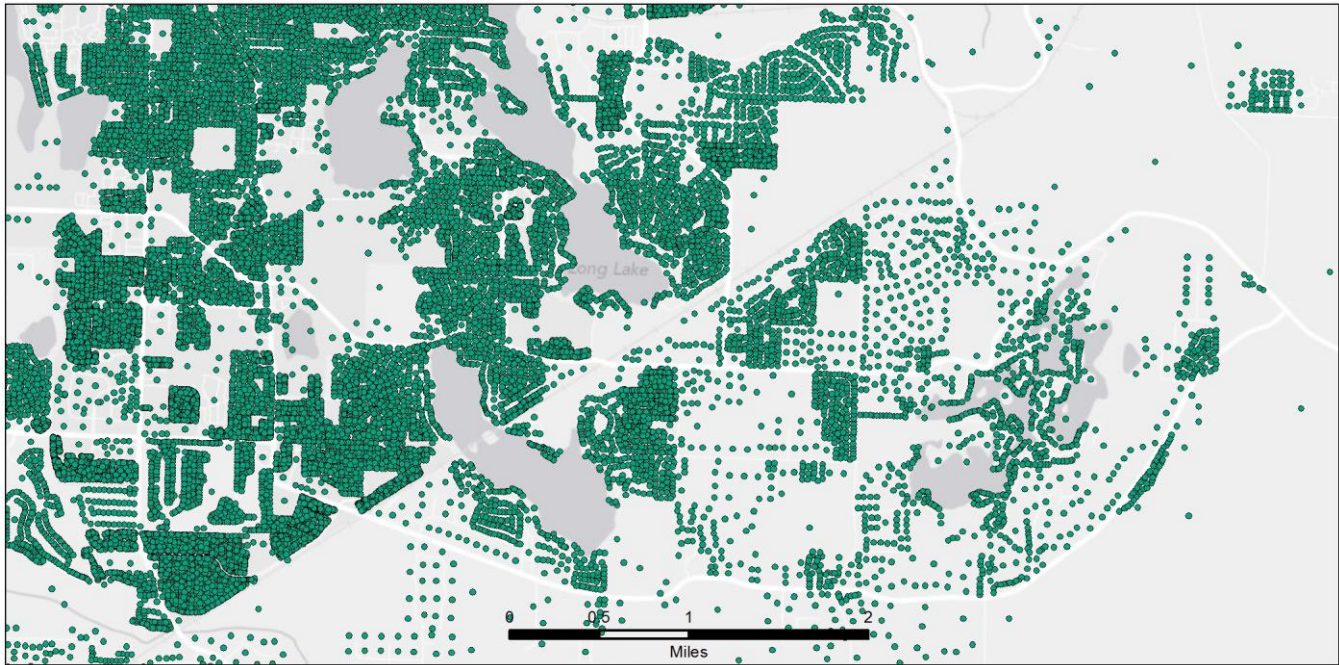

  (2) Master Address File (MAF)
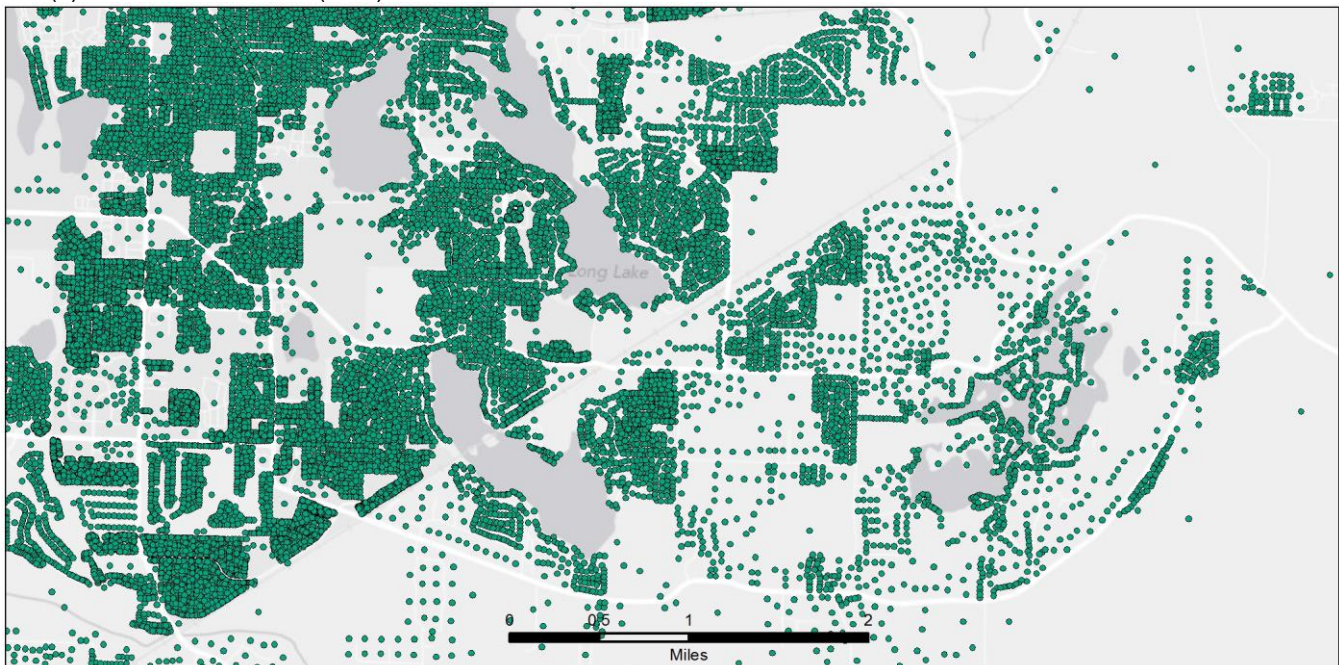
(3) Navteq Address Points, (4) County Parcel Points

(5) Navteq Streets, (6) TIGER 2010 Streets, (7) TIGER 2006 Streets

(8) Zip +4 Centroids

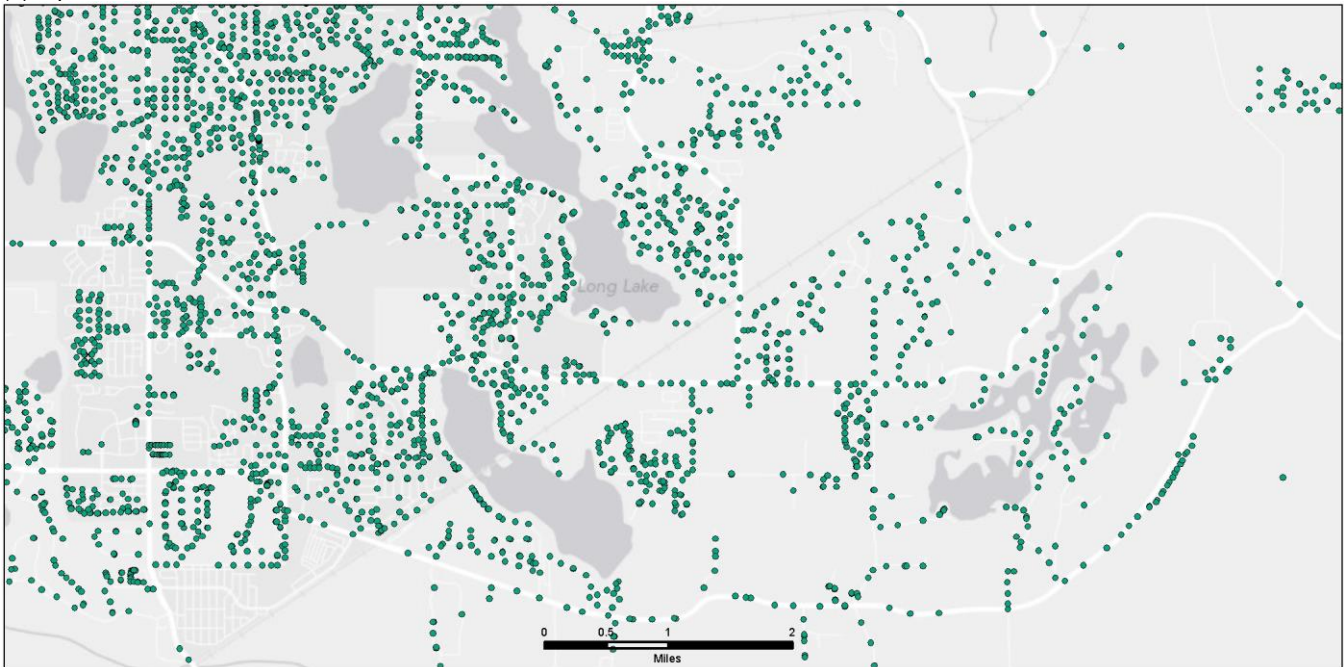(9) Navteq Street Segment Points
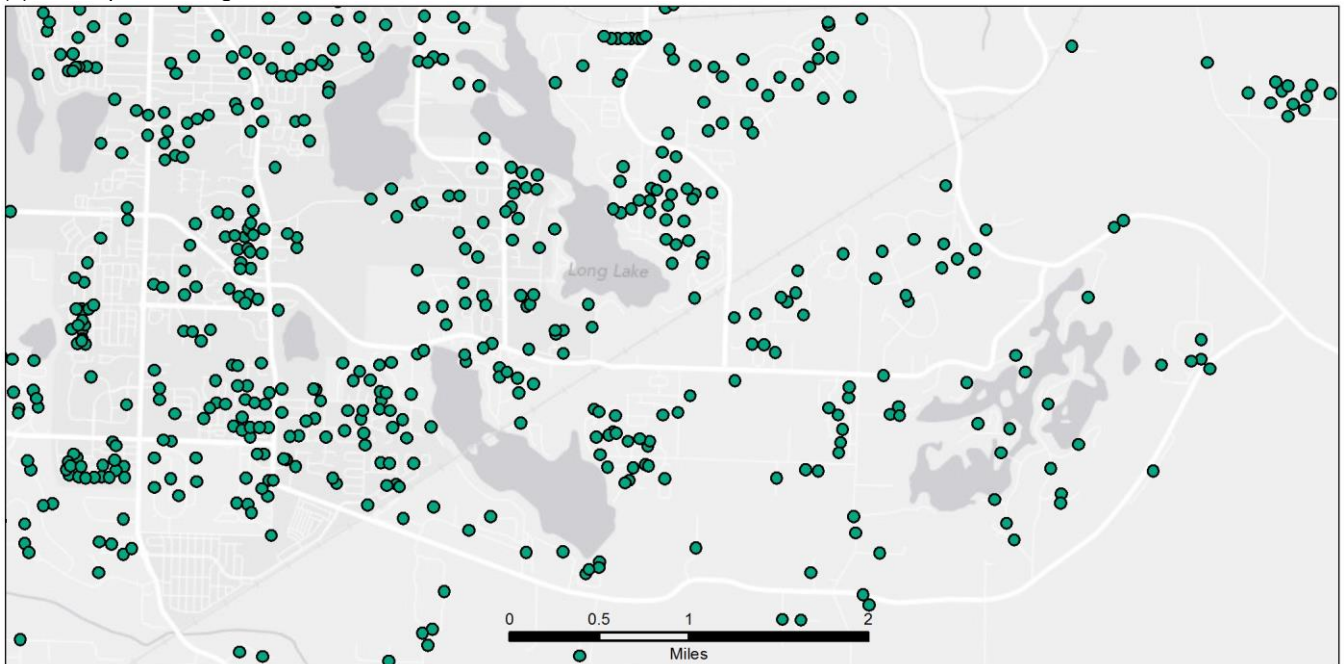
(10) City Points
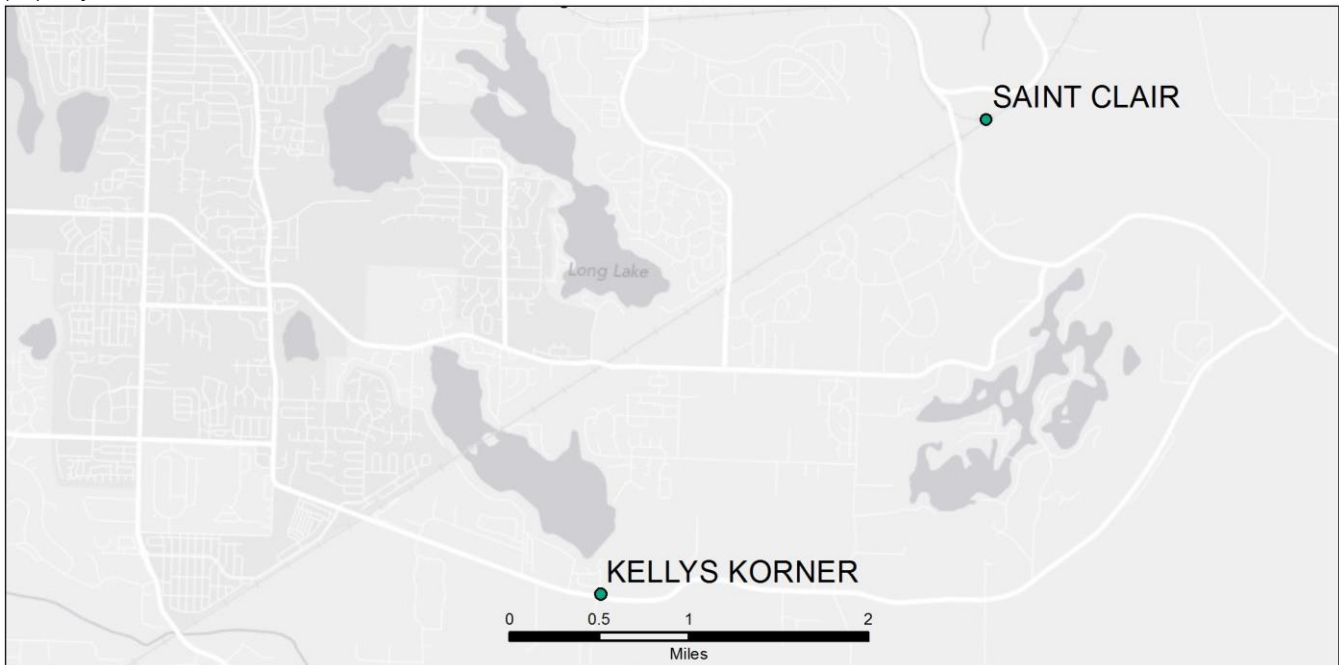
(11) 5 Digit Zip Code Points
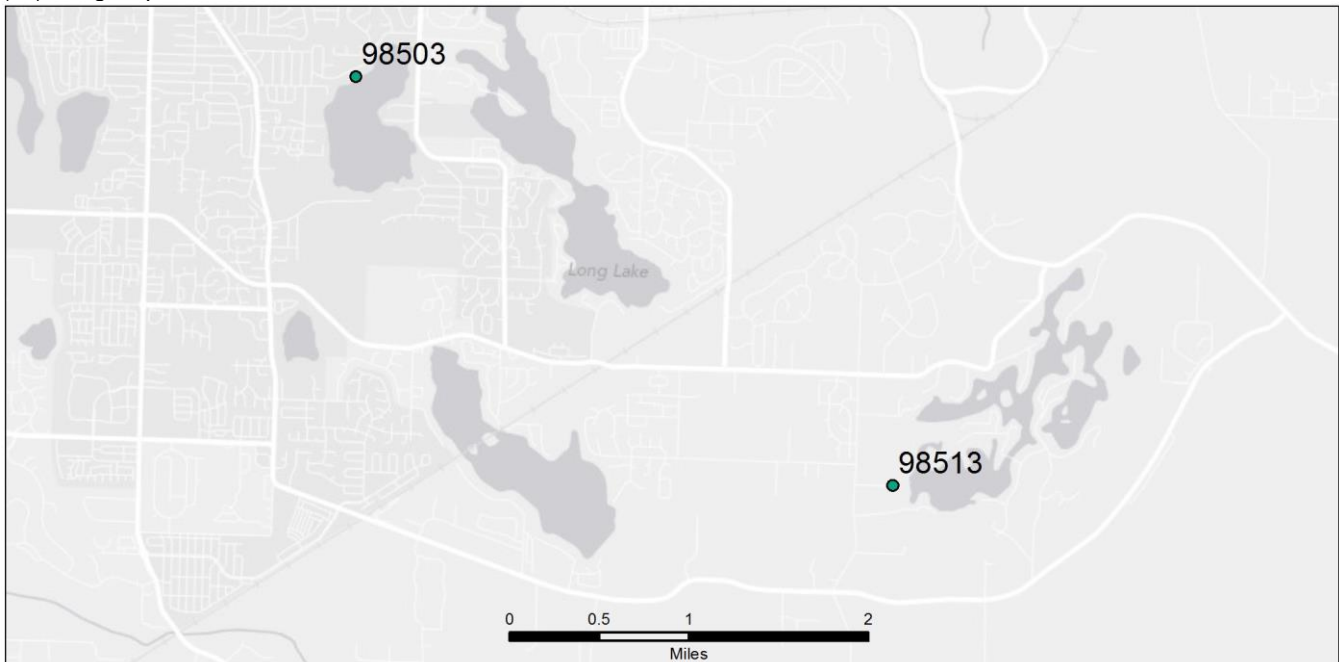
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ASP.NET Test Page
Enter an address into this page and it calls five Web services and one mapping application.
http://state-wamas.des.wa.gov/testwebservices/default.aspx

Revisions
8/7/2013
Added input parameter for zip+4.
Added input parameter for the MelissaData Unique AddressKey from the Correction Web service.
Added the MelissaData Geocoder/GeoPoint matches for rooftops and streets.

12/15/2014
Removed the Addresskey output XML element.
Added the NavTeq Zip+4 locator service.
Added Consumer to the required input. Users should standardize values and at least provide the agency.

Contact
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